

## **Evidence submission to UK Productivity Commission**

**Professor Andrew Henley, Cardiff Business School, Cardiff University**

The evidence is submitted in my capacity of the lead in Wales for ESRC/UKRI The Productivity Institute and as co-ordinator of TPI's Wales Productivity Forum. It also draws on extensive experience as an advisor to Welsh Government. Cardiff Business School engages closely with Welsh Government and with the Development Bank of Wales supporting the provision of an evidence base on the performance of the Welsh economy. This submission reflects, in particular, input from Robert Lloyd Griffiths OBE, TPI Wales Productivity Forum chair, Jonathan Price, Chief Economist, Welsh Government, Professor Max Munday, Director of the Welsh Economy Research Unit at Cardiff Business School, and Dr Helen Tilley at the Wales Centre for Public Policy.

### *Productivity in Wales in context*

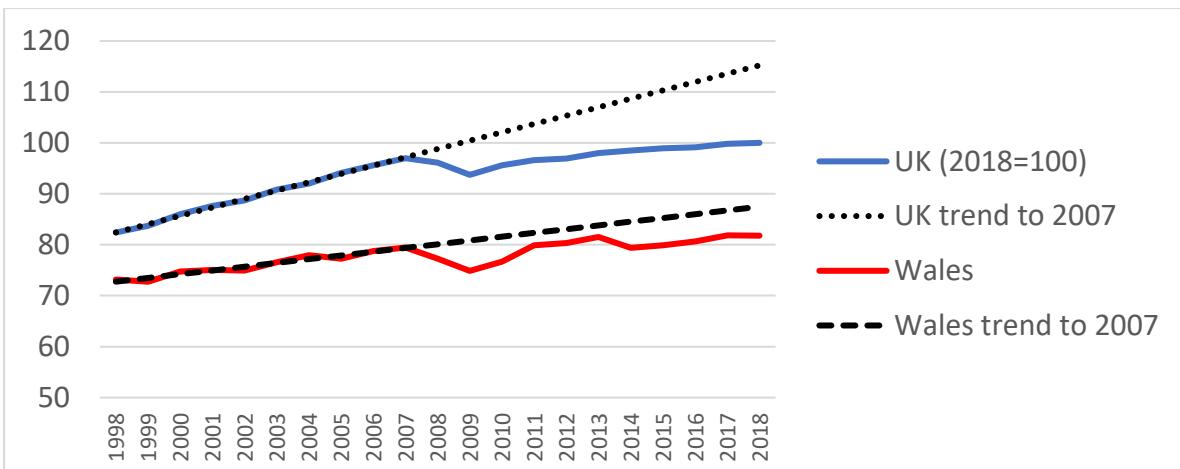
Wales has a persistent productivity gap with the rest of the UK and with other international competitor regions, and typically sits at or close to the bottom in UK regional productivity rankings, depending on definition used. Commentators have proposed deindustrialisation and the loss of activity in industries on which Wales relied strongly, notably mining and heavy manufacturing, as a key driver. However low productivity in Wales may be even more deep seated over the past century. Low productivity was certainly an important economic feature at the establishment of devolved government in 1999 and has remained so since. UK Industrial Strategy has limited direct salience in Wales as many policy levers covering education and skills, business and innovation support, and infrastructure are devolved. During the first term of the Welsh Government (1999-2003) an explicit target for closing the gap in Welsh Gross Value Added (GVA) per head of population was set. The analysis underpinning this highlighted the need to address both the low rate of economic activity (jobs per head of population) and low rate of labour productivity (value added per job, or per hour worked). Economic activity rates in Wales have subsequently over the past two decades converged to around the UK average. Despite implementation of subsequent economic strategies, low productivity has remained a feature of the Welsh economy.<sup>1</sup> GVA per head (of population) in Wales remained stubbornly constant at or just below three-quarters of the UK figure between 1998 and 2018. Productivity has proved to be a much more complex issue, linked far less directly to precise policy instruments, despite resources coming to Wales through three past rounds of EU Structural Funds support. Explicit targets are no longer defined, although a GVA target has been set by the recently funded Cardiff Capital Region Growth Deal.

Figure 1 charts trends in labour productivity in Wales (output per job) from 1998 to 2018. Trend lines to 2007 for both Wales and the UK are shown. These show that Wales has experienced both the wider UK stagnation in productivity growth since the 2008 global financial crisis and the growing gap over the intervening decade between actual and projected trend levels of productivity. However, in Wales up to 2007 the annual growth in productivity was lower and as a result the gap appears proportionately smaller. However, because of generally lower historic growth in Welsh productivity, the gap between Wales and the UK by 2018 had remained roughly the same as a decade earlier, at just under 20%.

**Figure 1: Wales and UK Trends in Output per Job**

---

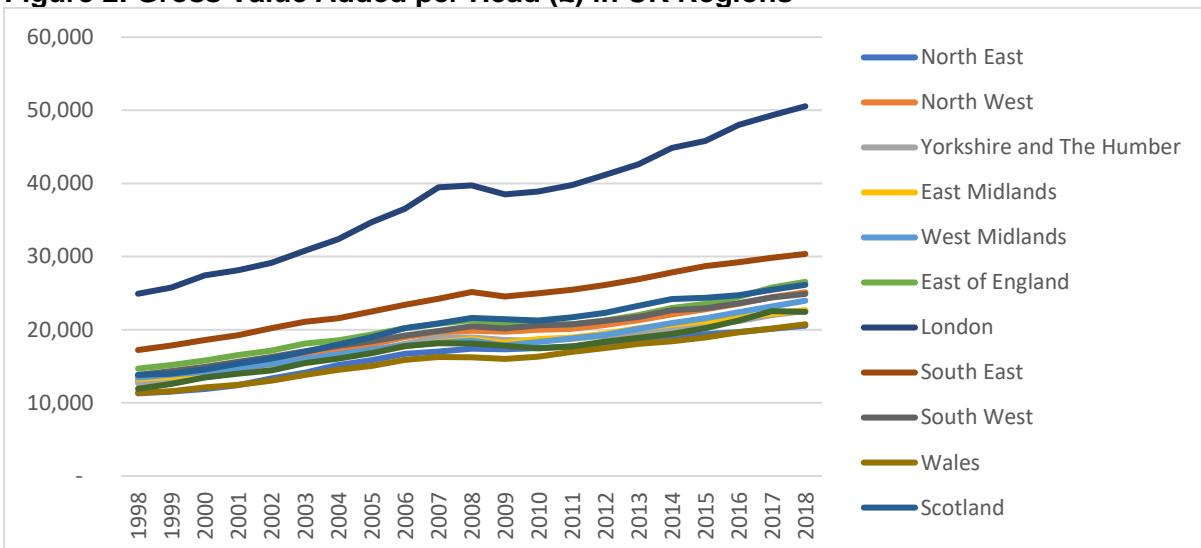
<sup>1</sup> The current Welsh Government economic strategy is [Prosperity for All: Economic Action Plan](#) (2017).



Source: computed from ONS data. Note: data are shown as index numbers, based to UK=100 in 2018

Productivity in Wales has steadily worsened relative to the UK, although that worsening largely took place in the decade before to the 2008 crisis. UK productivity data is, however, skewed by the much stronger performance of London. London has pulled way in productivity terms from the rest of the UK (see Figure 2). In this context some commentators argue that productivity performance in Wales is not dissimilar from other UK regions away from London and southeast England, particularly those which have also suffered similar long-term deindustrialisation. Figure 2 shows the consistent “bottom of the table” labour productivity performance in Wales.

**Figure 2: Gross Value Added per Head (£) in UK Regions**



Source: ONS

<https://www.ons.gov.uk/economy/grossvalueaddedgva/datasets/nominalregionalgrossvalueaddedbalancedperheadandincomecomponents>

It is important to note that official Welsh Government analysis pays close attention to differences in material wellbeing, as measured by the gap in median equivalised household earnings. Using this indicator, the measured prosperity gap between Wales and the rest of the UK is considerably smaller (Wales at 94% of UK average in the latest available data).<sup>2</sup> However both household earnings and productivity should a marked slowdown from early

<sup>2</sup> See Report of Chief Economist, Welsh Government, 2020, Chart 6, p. 12  
<https://gov.wales/sites/default/files/publications/2020-12/chief-economists-report-2020.pdf>

trends after 2008. Better outcomes on earnings compared to GVA reflect a weak tax base in Wales and fiscal transfers into the country.

### *Evidence on drivers*

Robust and timely evidence on the drivers of productivity levels at the sub-UK national level is sparse, and further hampered by lags in data release. Consequently, it is difficult to draw reliable conclusions on the drivers of productivity in Wales. Differences in the sectoral composition of the economy between Wales and other devolved nations and regions are unlikely to contribute much explanatory power. In fact, Wales has a slightly higher proportion of employment in the traditionally more productive manufacturing sector. It seems likely that productivity differences are explained by differences within sectors rather than by sectoral structure – in short Wales lack sufficient high value-added generating activity in private sector firms within key sectors. Private sector employment as a proportion of the total is lower in certain areas of Wales, and labour productivity measures of course also fail to account for other forms of non-market work. One illustration of the issue is seen in the very low rates of private sector employment in R&D roles – lower in Wales than in any other region or devolved nation. An explanation may also be found in the composition of supply chains and the position of Welsh businesses within those. There are very few large public limited companies registered and employing headquarters staff within Wales. These concerns are consistent with substantially lower average rates of hourly pay in particular industries in Wales compared to the UK as a whole, for example in IT, in finance and insurance, and in professional scientific and technical.<sup>3</sup>

Economists and others note that the single most important factor explaining productivity and pay differences is education and skills. Thus, the most likely highest contributing driver of low productivity in Wales is likely to be found in lower levels of skills acquisition. Evidence points to lower levels of skills attainment in Wales compared to many English regions. However, skills acquisition depends on both demand and supply factors, as well as in the way in which the “skills ecosystem” can match the two. As noted in the last Chief Economist’s report<sup>4</sup>, economic geography and agglomeration may also play a role. Cardiff ranks 11<sup>th</sup> and Swansea 29<sup>th</sup> in terms of major towns and cities by population size in England and Wales in 2020.<sup>5</sup>

Low levels of R&D activity, as measured by private sector employment, may be indicative of a generally weak regional innovation system in Wales which may in turn contribute to low productivity growth. Evidence of the relative performance of the innovation system in Wales is at best impressionistic and it is difficult to draw causal connection. However, the impact of innovation effort on productivity growth will, as noted by the OECD, rely not so much on the local production of knowledge, but on the dissemination and absorption of knowledge more widely into and across local businesses. Evidence, for example, on digital technology adoption in Wales illustrates this and shows a steadily improving picture, and one which has been further stimulated by the move to on-line activity during the COVID pandemic.<sup>6</sup>

Private sector capital formation is a key driver of productivity. Access to capital by Welsh businesses is potentially influenced by a range of factors. Recent analysis provides evidence

---

<sup>3</sup> See Report of Chief Economist, Welsh Government, 2020, Chart 9, p. 15 <https://gov.wales/sites/default/files/publications/2020-12/chief-economists-report-2020.pdf>

<sup>4</sup> Ibid.

<sup>5</sup> Source ONS via NOMIS. Cardiff moves to 13<sup>th</sup> once Glasgow and Edinburgh are included and has a population only slightly higher than Belfast. In rural Wales population is very sparse and levels of pay and GVA per hour among the lowest in the UK at NUTS3 level.

<sup>6</sup> See evidence from Cardiff Business School/Business Wales annual digital maturity surveys <https://www.cardiff.ac.uk/superfast-broadband-project/digital-maturity-survey>

on the likely “low equity equilibrium” faced by SMEs in Wales, arising in particular from the underdeveloped scale of venture capital provision.<sup>7</sup> The recent establishment of the Development Bank of Wales has resulted in some improvement in the number and scale of SME equity deals. However, it remains likely that total factor productivity in Wales is constrained by an underdeveloped regional capital market. In the short-term increased SME debt levels and rising concern about the ability of firms to repay debt are likely to hinder investment prospects significantly.<sup>8</sup>

### *Productivity, Brexit and COVID in Wales*

The labour market experience in Wales during the pandemic has mirrored that in the UK, with a dramatic reduction in payroll employees in the early months and a steady recovery from late 2020 onwards, despite furloughing. Similarly, GDP in Wales has tracked a similar path to that in the UK, and so we would not expect to see a markedly different pattern of labour productivity between Wales and the UK as a whole.

An early assessment of the impact of COVID on firm level labour productivity suggests SMEs in Wales supported through emergency lending in the both the micro and medium sized categories had below average levels of labour productivity.<sup>9</sup>

Recent reports and evaluations from the Development Bank of Wales (Economic Intelligence Wales) highlight the damaging impact of recent circumstances on Welsh SME performance. A body of research on SMEs suggests that the competitive discipline arising from exporting activity can stimulate labour productivity improvement. However, the value of Welsh exports fell by 27% in the year to 2021q1 (although imports also fell), the worst performance across UK nations.<sup>10</sup> Loss of easy access to international markets for manufactured and agricultural products may be a factor here. On the other hand, according to ONS data, Wales has experienced a similar improvement to the whole UK in net new business births in early 2021.

### *Assessment*

Given Wales’ greater exposure to the EU as a trade partner, recovery and productivity improvement in Wales is likely to depend on the availability of new markets, trade deals and new FDI in the post-Brexit trading environment. Previous experience of adjustment to shocks and to structural change has brought into focus shortcomings in the Welsh labour market. At present the scale of potential “scarring” effects in the labour market are uncertain. These could become apparent in loss of skills and the need for intervention to address reskilling.

The current Welsh economic and social policy context is heavily informed by the 2015 Wellbeing of Future Generations Act which requires the Welsh Government and other public bodies responsible for development and implementation of policy to attend to long-term considerations of sustainable development and a wider set of wellbeing objectives.<sup>11</sup> Implicitly the Act focuses attention on what economists term the ‘efficiency-equity’ trade-off,

<sup>7</sup> See Kapitsinis, N., Munday, M. and Roberts, A. 2021. Exploring a low SME equity equilibrium in Wales. *European Planning Studies* (<https://doi.org/10.1080/09654313.2021.1882945>)

<sup>8</sup> See Development Bank of Wales, Economic Intelligence Wales, Annual Report, August 2021 [https://developmentbank.wales/sites/default/files/2021-08/ENG%20EIW%20Annual%20report%202020\\_21.pdf](https://developmentbank.wales/sites/default/files/2021-08/ENG%20EIW%20Annual%20report%202020_21.pdf). 30% of Welsh SMEs in 2020Q4 were concerned about ability to repay debt (24% in 2020q3, and 24% for UK as a whole in 2020q4).

<sup>9</sup> See Henley et al. (2020) [https://developmentbank.wales/sites/default/files/2020-12/EIW%20bespoke%20report%20on%20Covid-19%20interventions\\_ENG.pdf](https://developmentbank.wales/sites/default/files/2020-12/EIW%20bespoke%20report%20on%20Covid-19%20interventions_ENG.pdf), figure 11, p. 24.

<sup>10</sup> Ibid.

<sup>11</sup> Responsibility for independent monitoring of progress under the Act rests with the Future Generations Commissioner, see <https://www.futuregenerations.wales>.

that is the idea that the pursuit of greater equity in economic outcomes across population and place may require some sacrifice in terms of efficiency allocation and use of resources in production. However, raising productivity in Wales will be the principal means through which environmentally sustainable and inclusive improvements in material and social well-being are delivered for the future population.

Despite being integral to the Wellbeing of Future Generations framework, the extent to which Wales will be able to take advantage of opportunities in emerging low carbon sectors is uncertain. At present ONS estimates suggest that only 1% of employment is in low carbon sectors. There are opportunities for this to grow, but policy intervention may be required to support the exploitation of these opportunities. Policy instruments tend to be in the competency of Westminster rather than Cardiff (for example decisions about major investment in tidal or wave energy, or further rail electrification). In this context there could be an enhanced future role for key regional institutions such as the regional growth deals in encouraging innovation, particularly if this is supported by a clear pan-Wales economic vision with clear identification of appropriate devolved policy levers and opportunities for interaction with UK Government policy instruments.

Finally, the UK's overall macroeconomic policy stance, both monetary and fiscal, is likely to exert an impact on productivity in Wales through its effects of regional aggregate demand, and in particular on the climate for business investment. The language of "levelling-up" has high salience in Wales, given past reliance on EU Structural Funding. How this translates into scale, scope, and governance of specific policy interventions to improve business productivity remains very unclear.

#### *Evidence gaps*

The focus of nearly all available evidence and data is on labour productivity. There is little or no current evidence of the multi- (or total) factor productivity (TFP) performance of the Welsh economy, and on whether poor labour productivity is offset in TFP estimates. Addressing this evidence gap is particularly important because of the need to understand the extent to which productivity growth in Wales (and other regions and devolved nations) is constrained by low levels of capital formation. The contribution of declining capital per hour worked is identified as a constraint on TFP growth in the UK in experimental ONS analysis.<sup>12</sup> It seems very unlikely that capital formation levels in Wales provide any exception to this pattern. There is one further reason to be pessimistic about TFP performance in Wales. This is because ONS Management Practices survey data suggest that businesses in Wales are less well managed than in English regions and in Scotland.<sup>13</sup>

Recent productivity research has highlighted the importance of appropriate price deflation in productivity comparisons for identifying qualitative improvements in capital. However there has been little attention paid to the impact of regional differences in prices. There are various dimensions to this, not solely related to regional differences in input and output prices. For example, lower house prices may impact available loan collateral for smaller SMEs.

While there is a need for improved firm and sector level analyses of productivity at the regional and devolved nation level, there is also a need for improved evidence on the

---

<sup>12</sup> See

<https://www.ons.gov.uk/economy/economicoutputandproductivity/productivitymeasures/articles/multifactorproductivityestimates/julytoseptember2019> .

<sup>13</sup> See

<https://www.ons.gov.uk/economy/economicoutputandproductivity/productivitymeasures/articles/managementpracticesingreatbritain/2016to2020#management-practices-by-firm-size-industry-and-region> , Figure 5.

contribution of long-run structural factors, such as agglomeration and infrastructure effects to regional and devolved nation productivity differences.

October 2021